

Small and Microthruster Propulsion Research at the  
Air Force Research Laboratory, Edwards AFB  
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Edwards AFB, CA

Clusters of satellites flying in cooperative formation require small and precise thruster operations to maintain formation integrity. Satellites in the 100-kg size class benefit from small thrusters for primary propulsion and micropropulsion for precision positioning and attitude control. A review of the research and development of small and micropropulsion thrusters at the Air Force Research Laboratory, Edwards AFB is presented with an emphasis on the propulsion package in development for the Air Force Research Laboratory TechSat21 flight in 2003.

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MEMORANDUM FOR PR (On-Site Contractor/In-House Publication)

FROM: PROI (TI) (STINFO)

28 Mar 2000

SUBJECT: Authorization for Release of Technical Information, Control Number: **AFRL-PR-ED-<sup>AB</sup>PP-2000-053**  
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**ICOPS 2000, 27<sup>th</sup> IEEE Int'l Conference on Plasma Science**  
**(New Orleans, LA, 04 Jun 2000) (Deadline: 04 May 2000)**

(Statement A)

1. This request has been reviewed by the Foreign Disclosure Office for: a.) appropriateness of distribution statement, b.) military/national critical technology, c.) export controls or distribution restrictions, d.) appropriateness for release to a foreign nation, and e.) technical sensitivity and/or economic sensitivity.

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APPROVED/APPROVED AS AMENDED/DISAPPROVED

\_\_\_\_\_  
ROBERT C. CORLEY  
Senior Scientist (Propulsion)  
Propulsion Directorate

(Date)